Appendix

Posters

The poster presentations will be arranged in the vestibule. Each poster will display a letter corresponding to one of the topic categories of the Symposium (A, B, C, D or E) and a number. The posters will be arranged in numerical order, irrespective of the topic categories to which they belong.

Poster Session A

1 A **Benzo(a)pyrene-7,8-diol-9,10-epoxide(BPDE)DNA-Adducts and Monooxygenase Activities in Mice Treated with Cigarette Smoke (CS) or Benzo(a)pyrene (BP) in Vivo**
N.M. Bjelogrlic, M. Iscan, O. Pelkonen and K. Vahakangas, Department of Pharmacology, University of Oulu, Oulu, Finland.

7 A **Acute Bronciolar Damage of Bromobenzene Inhalation in Mice and Rats**
J.E. Dahl, K. Aarstad, O. Nilsen and E. Dybing, Department of Toxicology, National Institute of Public Health, Oslo, and Department of Pharmacology and Toxicology, University of Trondheim, Trondheim, Norway.

13 A **Solubility Studies on an Industrial Plutonium Dust**
P.P. Foster, I. Pearman, M.E.D. Bains and D. Ramsden, AEE Winfrith, Dorchester, Dorset, UK.

25 A **Analysis of Phospholipid/Apoprotein Ratio in Extracellular Surfactant after Exposure to Nitrogen Dioxide or a Methyl Furan Derivative**
F. Lawrence and K. Miller, British Industrial Biological Research Association, Carshalton, Surrey, UK.

28 A **Cyto- and Genotoxic Effects of Automobile Exhaust on Mammalian Cells In Vitro**
W. Hadnagy and N.H. Seemeyer, Medical Institute of Environmental Hygiene at the University, Düsseldorf, FRG.

31 A **Urinary Metabolite Profiles and Pharmacokinetics of Antipyrine in Smokers and in Ex-smokers**
R. Schüppel, H. Bassmann, Institut Pharmakologie & Toxikologie, Technische Universität Braunschweig, FRG.

70 A **Factors Controlling Particle Elimination and Penetration in the Lung: Effects of Dust Properties**
Ch. Y. Li, J. Bruch, F. Gono, B. Rehn, Institut für Hygiene und Arbeitsmedizin, Universitätsklinikum der Gesamthochschule Essen, Essen, FRG.

Poster Session B

2 B **Dual Way Characterization of Aerosols by the Galajcis-1 — A Powerful Tool for Inhalation Exposures**
E.F. Aharonson, Q. Bernstein and N. Karasikov, Israel Institute for Biological Research, P.O. Box 19, Ness-Ziona, 70450 and Gadar Labs Inc., Migdal Ha-Emek, Israel

8 B **A System for the Exposure of Mice to Toxic Aerosols**
A. Black, J.N. Pritchard and M. Walsh, Environmental & Medical Sciences Division, A.E.R.E. Harwell, Oxon, UK.

14 B **Effect of Diurnal or Nocturnal Ozone Exposure on the Pulmonary Response of Rats**
L. van Bree, P.J.A. Rombout, M. Marra, P.H.B. Fokkens, A.J.F. Boere and J. Bos, National Institute of Public Health and Environmental Hygiene, Department of Inhalation Toxicology, Bilthoven, The Netherlands

20 B **Factors Affecting Particle Clearance from the Rat Lung**
C.G. Collier, A. Hodgson, M.R. Bailey and S.E. Barry, National Radiological Protection Board, Chilton, Didcot, Oxon, UK.

26 B **Outline of Facilities and Activity of Japan Bioassay Laboratory**
K. Nozaki, E. Nakayama and M. Enomoto
Japan Bioassay Laboratory, Kanagawa, Japan.

32 B **An Experimental Rabbit Model for Studying Acute Effect of Environmental Irritant Aerosols and Gases on Respiration, Heart and Circulation**
M.S. Islam, D. Haake, E.J. Reuter, Medizinisches Institut für Umwelthygiene, Düsseldorf, FRG.

36 B **Inhalation Toxicity Studies of Formaldehyde in Rats: 8-hour Continuous Versus 8-hour Intermittent Exposures**
J.W.G.M. Wilmer, R.A. Woutersen and V.J. Feron, TNO-CIVO Toxicology and Nutrition Institute, Department of Biological Toxicology, Zeist, The Netherlands.

37 B **Exhalation Rates of Volatile N-Nitrosamines in Comparison with Nitrosamine Blood Levels after Different Modes of Application in Rats**
R.G. Klein, B. Schmezer, P. Schmezer, B. Spieglhalder and D. Schmähl, Institute of Toxicology and Chemotherapy, German Cancer Research Center, Heidelberg, FRG.

42 B **Design and Performance Characteristics of an Inhalation Chamber for the Exposure of Small Laboratory Animals to Low Concentrations of Air Pollutants**
M. Marra, P.J.A. Rombout and H.W. Ballfoort, National Institute of Public Health and Environmental Hygiene, Department of Inhalation Toxicology Bilthoven, The Netherlands

46 B **A New Inhalation Apparatus Designed for Dogs and its Application to Toxicity Study of Volcanic Ash**
R. Nagata and M. Nitzek*, Shin-Nippon Biomedical Laboratories Ltd. Kagoshima and *Shibata Scientific Technology Ltd., Tokyo, Japan.

50 B **The Effect of Restraint in Nose-only Exposure Tubes during Pregnancy on Teratogenic Endpoints in Sprague Dawley Rats**
A.I. Nikiforov and G. Adgower, Battelle, Centre for Toxicology and Biosciences, Geneva, Switzerland.

58 B **Health Effects of Diesel Exhaust: The Influence of Enzootic Infections on the Incidence of Primary Lung Tumors in Diesel Exhaust Exposed Male Rats**
O.R. Moss, B.J. Greenspan, R.H. Busch, R.E. Buschbom, S.E. Rowe, Battelle Pacific Northwest Laboratories, Richland, WA 99352 and R.M. Schreck, Biomedical Science Department, General Motors Research Laboratories, Warren, MI 48090, U.S.A.

59 B **Health Effects of Diesel Exhaust: The Influence of Age during Exposure on the Incidence of Primary Lung Tumors in Diesel Exhaust Exposed Male Rats**
O.R. Moss, B.J. Greenspan, R.H. Busch, R.E. Buschbom, S.E. Rowe, Battelle Pacific Northwest Laboratories, Richland, WA 99352 and R.M. Schreck, Biomedical Science Department, General Motors Research Laboratories, Warren, MI 48090, USA

63 B **Animal Inhalation Facilities and Experimental Design for Diesel Engine Emissions**
T. Suzuki, T. Nakajima, J. Sueyoshi and S. Ishiwata, (JHERP), Japan Automobile Research Institute, Ibaraki, Japan.

Poster Session C

3 C **The Effect of a "Nuisance" Dust Inhalation on Lung Clearance**
B. Bellmann, H. Muhle and O. Creutzenberg, Fraunhofer-Institut für Toxikologie und Aerosolforschung, Hannover, FRG.

9 C **Pulmonary Distribution of Different Aerosol Particles as a Function of Time after Inhalation by Rats**
E. Drosselmeyer*, H.L. Muhle*, S. Pickering**, A. Seidel*.
*Kernforschungszentrum Karlsruhe, Institut für Genetik und Toxikologie, Karlsruhe,
*Commission of the European Communities, Joint Research Center, European Institute for Transuranium Elements, Karlsruhe, FRG.

15 C **Pharmacokinetics of Inhaled 2-Nitropropane in the Rat**
B. Denk, E. Deml, D. Oesterle, K.H. Summer and J.G. Filser, Institut für Toxikologie, GSF, Neuherberg, FRG.

21 C **Physiologically Based Modeling of Organic Solvent Toxicokinetics by Spreadsheet Programming on a PC**
G. Johanson and P.H. Naslund, National Board of Occupational Safety and Health, Solna, Sweden.

22 C **Pulmonary Deposition, Retention, and Clearance of a Pigmented Polymer in Rats**
H. Muhle*, B. Bellmann*, O. Creutzenberg*, R. Kilpper** and R. Mermelstein**
* Fraunhofer-Institut für Toxikologie und Aerosolforschung, Hannover, FRG.
** Joseph C. Wilson Center for Technology, Xerox Corporation, Rochester, NY, USA.

27 C **Kinetics of the Accumulation in the Lung and Associated Lymph Nodes of Inhaled Mineral Dusts during Prolonged Chronic Exposure**
J.H. Vincent, A.D. Jones, A.M. Johnston and C. McMillan, Institute of Occupational Medicine, Edinburgh, Scotland, UK.

33 C **Carbon Fibres: Results of a Further Survey of Process Workers and their Environment in a Factory Producing Continuous Filament**
H.D. Jones, Courtaulds plc, Coventry, W. Midlands, UK.

Poster Session D

4 D **The NTP/NIEHS Studies on Methyl Isocyanate**
J.R. Bucher, E.E. McConnell, B.A. Schwetz and M.D. Shelby, National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, NC 27709, USA.

5 D **Early Response of the Surfactant and Antioxidant Systems in Rat Lungs after Cadmium Chloride Inhalation**
J. Boudreau, R. Vincent, D. Nadeau*, B. Trottier, M. Fournier, K. Krzstyniak and G. Chevalier, Université du Québec à Montréal, Québec, Canada, and *Université de Sherbrooke, QC, Canada.

10 D **Effects of a "Nuisance" Dust Inhalation on Lavagable Lung Cells**
O. Creutzenberg, B. Bellmann, M. Ocak and H. Mu[illegible] Fraunhofer-Institut für Toxikologie und Aerosolforschung, Hannover.

11 D **Methyl Isocyanate (MIC) Toxicity in Rats and Guinea Pigs Following Acute, High Concentration Exposure**
D.E. Dodd, M.R. Fedde, E.H. Fowler, C.M. Troup, L.A. Magnuiss and F.R. Frank, Bushy Run Research Center, Union Carbide Corporation, Export, PA, USA.

16 D **Eicosanoid Production by Rabbit Alveolar Macrophages after In Vitro and In Vivo Ozone Exposure**
K.E. Driscoll and R.B. Schlesinger, Institute of Environmental Medicine, New York University Medical Center, NY, USA.

17 D **Morphogenesis of the Lung Cancer Induced by Diesel Emission**
S. Kitamura, Y. Takaki, N. Kuwabara and Y. Fukuda, Juntendo University School of Medicine, Tokyo, Japan.

23 D **The Effect of Duse Inhalation on Bacterial Clearance from the Lung**
M.I. Gilmour, F.G.R. Taylor and C.M. Wathes, School of Veterinary Science, University of Bristol, Langford House, Langford, Bristol, UK.